

INTERNATIONAL SEARCH REPORT

Inter Application No

PC1/US 02/1501

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08L81/06 C08K5/51 C08K5/00 G02B1/04 C08J5/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08L C08K G02B C08J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE WPI Section Ch, Week 199916 Derwent Publications Ltd., London, GB; Class A26, AN 1999-186388 XP002247275 -& JP 11 035705 A (SUMITOMO CHEM CO LTD), 9 February 1999 (1999-02-09) abstract	1-10, 26, 27
X	US 3 755 256 A (BEVERLY G) 28 August 1973 (1973-08-28) column 2, line 43 example 4 claims	1-22

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

11 July 2003

Date of mailing of the international search report

06/08/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Russell, G

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International Application No.

PCT/us 02/01501

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -	US 5 438 086 A (STEVENSON DONALD R ET AL) 1 August 1995 (1995-08-01) column 3, line 58 column 23, line 46 ----	1-16
X	US 2001/053805 A1 (COFFIN-WERNER TRACY L ET AL) 20 December 2001 (2001-12-20) paragraph '0066! claims 1,6 ----	1-16
A	US 2002/010307 A1 (SCHWAB THOMAS H) 24 January 2002 (2002-01-24) the whole document ----	1-27
A	US 4 409 351 A (LEE GARLAND G) 11 October 1983 (1983-10-11) example 5 X claims 1,2 ----	1-4
P,X	US 6 420 514 B1 (HAGE MARTIN L ET AL) 16 July 2002 (2002-07-16) claims ----	5,11,17, 20,26,27
P,X	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 04, 2 April 2003 (2003-04-02) -& JP 2002 357813 A (SUMITOMO CHEM CO LTD), 13 December 2002 (2002-12-13) abstract -----	5,11,17, 20,26,27

INTERNATIONAL SEARCH REPORT

International application No.
PCT/ISA/210 03/11501

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 5-27 (partially)
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 5-27 (partially)

Present claims 5 to 22 relate to a products defined by reference to desirable characteristics or properties, namely light transmittance, yellowness index, or color factor (claims 5-16), yellowness index (claims 17-19, 23-25, 26), and color factor (claims 20-25, 27).

The claims cover all products having these properties, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such products. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the products by reference to a result to be achieved, so-called desideratum claims. There are no essential technical features present in said claims to allow the skilled person to attain said desired results, with the result that the claims only amount to claiming the underlying technical problem of the specification. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

According to the teaching of the application, these desired parameters are achieved by polysulfone compositions comprising an organic phosphorus compound and one of an organic brightener and a blue to violet dye (see also claims 1, 2).

Furthermore, current claims 5 to 22 relate to a products defined (inter alia) by reference to the following parameters:

P1: total luminous light transmittance (ASTM D-1003) of a 0.1 inch thick sample

P2: yellowness index (ASTM D-1925) on a 0.1 inch thick sample

P3: color factor defined by a particular formula.

The use of these parameters in the present context is considered to lead to a lack of clarity within the meaning of Article 6 PCT. While said parameters can be determined adequately by procedures and ASTM methods provided in the application, in general parameters are only allowed to define a product when the product cannot be defined adequately in another way (EPO Guidelines C-III, 4.7a). In this case, it seems possible to adequately define the claimed products by reference to the composition from which they are prepared.

Additionally, parameters refer to values at a particular thickness which may not be explicitly disclosed for such polysulfone compositions in the prior art. Prior disclosures may not even disclose such parameters. Hence, it is impossible to compare the parameters the applicant has chosen to employ with what is set out in the prior art (EPO Guidelines C-IV 7.5).

Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the polysulfone compositions/products comprising polysulfone resin, an organic phosphorus compound, and one of an organic optical brightener and a blue to violet dye.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Therefore, claims 5 to 27 could only be searched partially.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.